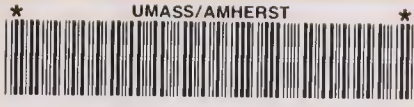


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MIDDLE SCHOOL JUNIOR HIGH SCHOOL EDUCATION

GOVERNMENT DOCUMENTS
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**A REPORT OF THE
MASSACHUSETTS BOARD OF EDUCATION
STUDY COMMITTEE**

NOVEMBER 1980

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**REPORT OF THE STUDY COMMITTEE ON
MIDDLE SCHOOL/JUNIOR HIGH SCHOOL EDUCATION
TO THE
MASSACHUSETTS BOARD OF EDUCATION**

November 1980

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TABLE OF CONTENTS

Section	Page
I Introduction and Background	1
II Recommendations	5
III What is Going On? Programs and Practices	9
IV Review of Current Research on the Early Adolescent Learner <i>Prepared by Dr. Harry Schumer</i>	17
V An Instrument for Local Assessment of Early Adolescent Education	25
Bibliography for Review of Current Research	29

SECTION I

INTRODUCTION AND BACKGROUND

At the beginning of this century when the junior high school movement originated in the United States, its advocates believed that it was educationally essential that early adolescents attend schools that were distinct entities, neither elementary nor high school in nature. They believed that children in the age group required a variety of experiences designed to enable them to make successful transitions from childhood to adulthood. For a number of years, the philosophy of the junior high school flourished within American educational circles, especially in the major metropolitan areas. The movement slowed down during the depths of the 1930's depression and was almost stopped by two world wars; the post World War II "baby boom" helped reactivate the movement. Advocates of middle schools evolved out of the movement because of their disillusionment with junior high schools.

During these chronological periods, very limited research was done in the field of junior high school education in the United States, and little national attention was given to the importance of this strategic educational period. Consequently, the junior high school or middle school became the "stepchild" in many school districts and received fewer resources than the elementary or high schools. For instance, when many cities and towns met the need for updated or additional high school facilities, the junior high school population was often assigned to the old high school facilities, deemed inadequate or too small to accommodate high school students.

In addition to the issue of facilities, very little national consideration has been given to the types of organization, curriculum, services and educational experiences needed by adolescents if they are to make a successful transition from childhood to adulthood. One consequence is that many junior high schools reflect the influence of high school supervisors who are often oriented towards subject matter fields and instructional methodology rather than to the individual adolescents and their specific learning needs. A frequent result is that many adolescents are frustrated and unsuccessful in school and learn how to "drop out" from their school experiences; however, they may continue to be physically enrolled until they eventually leave, usually before high school graduation.

In September of 1979, acting on the recommendation of the State Commissioner of Education, Dr. Gregory R. Anrig, the State Board of Education appointed a study committee on middle school/junior high school education. In the recommendation, Commissioner Anrig stated that the committee would be charged with the following tasks:

1. To examine current practices in middle school/junior high school education in Massachusetts and the nation.
2. To elicit reactions from the educational community and the public regarding strengths and weaknesses of current practices.
3. To review relevant research and knowledge about the intellectual, social, emotional, cultural, and physical needs of early adolescents, and to relate this research and knowledge to the teaching and learning of early adolescents.
4. To provide a forum or forums for those interested to suggest ideas to improve education of early adolescents, and to react to findings and conclusions of the study committee at a preliminary stage.

5. To submit to the State Board of Education a report of findings, conclusions, and recommendations by no later than November, 1980, which can be used by the State Board, local school officials, and others to guide efforts to improve middle school/junior high school education in the Commonwealth for the 1980's.

The State Board approved the Commissioner's recommendation to appoint the committee and indicated it was doing so to provide leadership on issues affecting middle school/junior high school education in the Commonwealth and to assist local school officials by this effort. The study committee was allowed to determine its operating procedures and urged to provide the greatest possible help to local school officials' efforts to improve middle school/junior high school education.

The membership of the study committee reflected various interest groups in the education of adolescents. The representatives included:

John H. Lawson, *Chairperson*
Superintendent
Lexington School District

TEACHERS

Kay Latter
Massachusetts Federation of Teachers
Peabody

Joseph Matulaitis
Massachusetts Teacher Association
Southbridge

Janet Morrison
Massachusetts Teacher Association
Brockton

Nancy Finkelstein
Massachusetts Teacher Association
Malden

HIGHER EDUCATION

Carol Gilligan
Harvard Graduate School of Education

Harry Schumer
University of Massachusetts/Amherst

MASSACHUSETTS STUDENT ADVISORY COUNCIL

Mitchell Glanz
Randolph

Beverly Schwartzberg
Amherst

MASSACHUSETTS JUNIOR HIGH-MIDDLE SCHOOL PRINCIPALS ASSOCIATION

Louise E. Gaskins
Ayer Junior High School

Donald Wilson
Nauset Regional Middle School
Orleans

Robert O'Donnell
Stoughton Junior High School

MASSACHUSETTS ASSOCIATION OF SCHOOL SUPERINTENDENTS

Henry Christ
Assistant Superintendent
Triton Regional School District

MASSACHUSETTS PARENT-TEACHER-STUDENT ASSOCIATION

Pat Rosenthal
Lexington

Joanne Batchelder
Haverhill

MASSACHUSETTS ASSOCIATION OF SCHOOL COMMITTEES

Amy Schneider
Hull

Myra Silver
Chelmsford

MASSACHUSETTS SCHOOL GUIDANCE COUNSELORS

Irene Brennan
North Intermediate Junior High School
Wilmington

Leonard Medeiros
Normandine Junior High School
New Bedford

Janice Mauriello *Staff*
Gerri Mercadante

Brunetta R. Wolfman
Staff Director

The committee held its first meeting in November 1979 and shortly thereafter divided its membership into two sub-committees: one to survey current practices of middle school/junior high school and another to review research on early adolescents. The committee on current practices collected information on practices in the Commonwealth and other states through survey instruments, letters from interested educators and reactions received at the two public forums when many interested teachers, counselors, parents, principals, superintendents, and school committee members gave testimony about model programs in existence throughout the state and also expressed their aspirations and concerns about the education of early adolescents.

The committee agreed upon a working definition of the early adolescent: "The early adolescent period encompasses young people between the ages of 10 to 15 and grades 5 to 9. It is a period in which physical and psychological changes are occurring. There are changes in the body formation, the development of reproductive maturity and secondary sex characteristics, and cognitive development. It is a transitional state between childhood and age 16."

In addition, the Study Committee based its' work on the following basic assumptions: the current practices of many traditional schools serving early adolescents seem to be at odds with the developmental characteristics of students of this age. The central finding of the literature on early adolescents is that there is tremendous variability on all developmental parameters. Given this variability, placing early adolescent students in particular grades by age may not be appropriate, and tracking, which may lock students into differential ability levels may reflect the rate of developmental rather than intellectual capability.

The other observation from the literature is that the changes experienced by children around the time of puberty can be unsettling and confusing. Identity problems become central at this time: coming to terms with his/her own body; developing a value system; gaining emotional independence from authority; beginning to explore vocational opportunities and alternatives.

The main educational objectives or aims during early adolescence, should be:

- 1) to develop the capacity for analytic thought which begins to arise at this time. Whereas in elementary schools, the goal is to teach everyone to read between the ages of 5-7, often leading to the establishment of K-1-2 programs and extra help for those children having difficulty; there is not a similar approach to the second major transition in cognitive development, between 11 and 13. Efforts should be directed toward identifying programs that would facilitate the transition to formal or analytic thought; efforts should be made to insure that options for some students remain open for entry into higher instructional levels throughout this period;
- 2) to foster the students' understanding of self and others, of membership in a community. Consistency and coherence in human relationships between teachers and students and among students themselves should be considered essential to develop in the students. Thus,

there should be a gradual shift from the single teacher or teams of teachers in the self-contained classroom to the more diverse community of teachers and students;

- 3) to address the relationship between the individual and the society and to involve early adolescents more in the community and bring them in contact with more adults in the community, because children around puberty begin to think of their futures as members of society. This could be realized by a variety of community service internships and apprenticeship activities which would be closely linked to their learning activities at school.

It would be desirable for early adolescents to be educated in settings where:

- 1) there is a priority placed on the development of analytic thought over an extended period of time so that students might emerge qualified to handle the greater abstraction of the high school curriculum and society at large;
- 2) the school is organized as a coherent community with consistent and supportive relationships among students and where relationships with adults are more prominent and less dispersed;
- 3) there is a closer tie between the school and the society at large.

The Middle School/Junior High School Study Committee prepared this report after studying the available research on adolescent behavior and education, and after surveying the junior high schools throughout the Commonwealth to determine what is actually happening to students in this age group. The Study concludes that some of the practices being employed to educate adolescents throughout the Commonwealth are not consistent with the philosophies being advocated by junior high school and middle school experts in the Commonwealth and throughout the nation. Moreover, some of the practices are inconsistent with the available research dealing with this age group. Consequently, the Study Committee decided to propose that its recommendations be used by local school committees and educators to compare their junior high school curriculum, organization, services, and teaching methods for the purpose of determining whether they are consistent with our recommendations.

The members of the Committee hope that local school authorities will find the recommendations helpful and that they will result in the improvement and strengthening of their junior high schools and middle schools.

John H. Lawson
Chairperson

SECTION II

RECOMMENDATIONS

The concept of a school organization to serve students between the elementary and high school years has been a part of American education throughout this century. The need for schools to provide for this transitional period has been stated as a conclusion in numerous research projects over the past fifty years. The research reviewed by this committee and as stated in this report, verifies this fact. What emerged from this recognized need was the "Junior High School".

Over the past two decades, middle grade education has increasingly come under criticism generally because it has not adequately met the stated need, a school that is different to meet the known uniqueness of the 10-14 year old. It has been criticized for not providing for a gradual transition from the self-contained elementary school and the departmentalized high school.

Recent studies of school dropouts conducted by the University of Southern California show that 80-85% of students interviewed "stopped out" of school in grades seven or eight. One of the most often stated goals of the junior high school movement was to decrease the number of school dropouts. Recent Department of Health, Education and Welfare reports indicate that the highest incidence of vandalism in schools is in those schools for students in the middle. These facts, along with numerous others, as shown in the research section of this report seem to point out that schools for students in the middle have not met the stated needs which have resulted in much of the criticism of lay people and educators alike.

Because of the unique physical, social, emotional and intellectual characteristics of this age group, the correct kind of school has to be different, but not so different, so unusual, that it doesn't fit in between the elementary school and the high school. It has to help students move easily between schools and provide them with the basic skills to succeed in future schools.

We feel that the mistakes made in the past, at this level of education, in general, must now be corrected through genuine innovation based on sound research on characteristics of this age group.

Because of recent changes in the regulations for certification providing for training of teachers for schools in the middle, and the appointment of this study committee, Massachusetts is in an excellent position to be a leader in improving education at this level.

The Study Committee recognizes that Massachusetts school districts are facing declining enrollments and fiscal constraints, because the Middle School/Junior High Committee members face daily challenges related to the decrease in students and declining resources. It is their experience which causes them to reject the idea that any changes in curriculum, methods or organization are unrealistic. The Committee urges educators and policy makers to view the current situation as a time of opportunity, a period in which existing resources can be utilized to change direction and do careful planning for a smaller number of students. The recommendations were developed within the context of the existing realities and with the conviction that additional funds are not a key to implementing the recommendations. The Study Committee urges local school districts to analyze their programs for early adolescents and use the recommendations as guides to good programs to meet the needs of the students. The recommendations are divided into three categories: Curriculum, Teacher Preparation and Inservice Training, and Organization.

Curriculum

- All curriculum presently used in junior high/middle schools should be reviewed to determine if it is appropriate for adolescents in light of current research.
- Because early adolescents is an age of natural curiosity, the curriculum should include a wide variety of exploratory courses and activities.
- In an effort to match teaching and learning styles, the curriculum should contain a wide variety of teaching materials and teaching methods.
- To address the relationship between the individual and society, the curriculum should emphasize early adolescent involvement in community life and their relationships with adults both in the school and in the community.
- The relations among academic subject disciplines should be demonstrated through the development of interdisciplinary curriculum units.
- A variety of hands-on experiences should be provided to students in all areas where such learning experiences are applicable and appropriate.
- Parents and community members are important resources for early adolescent learning and should be used on a regular basis to assist in curriculum development.
- A well organized career awareness program utilizing community resources should be included in the curriculum.
- Schools at this level should have a health education program, designed to be integrated into existing programs or into programs which include issues such as: physical development, sexual development, alcohol, drugs, nutrition, and family relationships.
- The curriculum should be organized to include daily physical activity that recognizes the changing characteristics of this age group and the special needs of students with physical problems.
- Enrichment and remedial programs should be available to students as part of the curriculum.
- Programs should reflect cultural pluralism to enhance students' knowledge and perception of various racial, ethnic and socio-economic groups.
- Efforts should be directed toward identifying programs that foster and assist in the transition from concrete to formal or analytic thought.
- A heavy emphasis should be placed on mastering basic skills when necessary.
- Independent study and decision-making skills should be taught and students should be encouraged to use them at this level.
- Underlying the development of all curriculum should be an emphasis on "how to learn" rather than "what to learn."

Teacher Preparation and In-Service Training

- The State Board of Education should assure that programs approved for teacher training institutions are preparing teachers to address the specific needs of this age level.
- Interdisciplinary team teaching experiences, group discussion methods and group problem solving techniques should be a part of the pre-practicum and practicum training.
- Teacher preparation programs, pre-service and in-service, should include methods for individualizing instruction for early adolescents.
- Psychology and education courses, in the undergraduate program, should concentrate on building an understanding of the unique characteristics of this age level.
- Since most teachers presently working with early adolescents were not trained to teach in intermediate schools, in-depth prolonged in-service training should be provided and funded in every school system emphasizing the intellectual, social, emotional and physical characteristics of this age group.
- Additional Commonwealth Inservice Institute funds, provided by the State, should be concentrated at this level. In the future, more funds should be allocated.
- Every teacher at this level should be able to assist students to develop their reading and writing skills.
- Middle school/junior high teachers need to understand the influence of the peer group so that it can be used to foster good human relations.
- In order to facilitate instruction within regular programs, efforts should be made through pre-service, in-service or other identified services, to prepare teachers to address the needs of diverse student populations (i.e. special education, bilingual and minority).
- The State Board of Education and the Commissioner should encourage and support institutions of higher education and foundations to direct more resources toward providing needed research and evaluative studies on intermediate education.

Organization

- Schools for early adolescence should be organized to reduce undue stress and safeguard the mental health of all its students and school personnel.
- In order to provide a gradual transition from elementary school to high school and to provide more effectively for the physical, cognitive and social development of the children, students should be in one transition school for at least three years.
- Future reorganization in individual school districts should consider inclusion of the ninth grade in the high school if the high school is not excessively large.
- Teachers should be organized into interdisciplinary teaching teams to provide the needed personalized and individualized attention.
- Class schedules should be flexible in order to meet the needs of this unique age group.

- Grouping of students should be the responsibility of the teaching team and remain flexible because of the constantly changing characteristics of this age group. To avoid labeling of students, horizontal or vertical groupings over an extended period of time must be discouraged.
- Teacher/pupil ratios, at this level, should be lower than those at either the elementary or high school level; class sizes should be flexible in order to meet the needs of this unique age group.
- Strong guidance programs with sufficient numbers of qualified counselors and a teacher advisor program are necessary at this level.
- Student governance and discipline procedures should be developed with input from students, teachers, administrators and parents.
- Organizational structures should be devised which will encourage and not hinder student problem solving, adolescent decision making and student enthusiasm.

SECTION III

WHAT IS GOING ON?

SCHOOL PROGRAMS AND PRACTICES

The Study Committee underscored the most important characteristic of children between the ages of ten to fifteen, change. They recognized that many of the existing educational programs and structures did not often address the developmental aspects of early adolescents. Unfortunately, budgetary and administrative questions are often motivating factors in determining how ten-to-fifteen year olds will be educated.

In 1977-78 there were 449,734 Massachusetts students in grades five through nine. They were divided in the following grades:

Grade 5	82,037
6	85,719
7	90,559
8	93,996
9	97,423

The average per pupil expenditure of \$1,697 was \$140 less than the per pupil expenditure at the high school level. The Study Committee suggests that the ratio does not take into account the variability and special developmental characteristics of the age group.

The schools between the elementary grades and the high schools are called middle schools, junior high school, intermediate schools, or sometimes, are unidentified by a name. The grade configurations are 4 through 9, 5 through 8, and 7-8, but the most common grouping, both locally and nationally, are grades 6 through 8. In 1977-78, there were 1,146 K-8 schools, 145 middle schools and 181 junior high schools. No two intermediate schools are ever exactly alike. Some are old, some new; some are overcrowded, and others are underenrolled. The environment of the schools is determined, not by the condition of the buildings but by the occupants. The atmosphere is often that of a "waiting area", half-way mark between elementary and high school, with aspects of both without being either.

The physical plants of intermediate schools vary in age from new to more than 100 years of age. Some buildings are very overcrowded, but decreased enrollments have caused other buildings to have space available for expanded programs or for community use. The buildings tend to be clean and well maintained, and student work is often displayed throughout the buildings.

Most intermediate schools display an aura of vitality, motion and lively action. The students, whether in class, in the corridors, cafeteria or playground, are in motion. They are more frequently involved in active experiences rather than passive learning; while there is much activity in these schools, not all of it is happy or relaxed, because many of the students are undergoing crises of change at some level. It is difficult to stereotype the pupils, but they may be many things: curious, disinterested, friendly, hostile, moody, cheerful, anxious, confident, insecure, self-assured. One would not characterize them as quiet, predictable or docile. Considering the population of intermediate schools, the unfamiliar observer might think that disorder is the norm, but most of the movement is purposeful.

Students in the early intermediate grades readily admit that they like school and enjoy being with their friends. Seventh and eighth graders are more reluctant to disclose that they like school, but their attendance is usually high and a positive indicator. As the students move through adolescence, they become more reluctant to admit that they like school. This creates a greater challenge. Unfortunately, some teachers are not prepared to meet the needs of this volatile age group, but those who choose to teach in the intermediate school like the children and the dynamic tension between intellectual and physical growth.

A. Organization for Instruction

There are two primary ways in which intermediate schools are organized for instruction, departmentally or interdisciplinary teams. The departmental form usually means that teachers are identified by the subject which they teach and not by a group of students, nor do they have groups of students in common with other teachers. The team or cluster concept is becoming increasingly popular and usually involves four or five teacher specialists in the fields of English, mathematics, science, social studies and occasionally reading. Teacher teams are assigned 100 to 150 students who are then divided into smaller groups; these groups tend to be heterogeneous, and membership is determined by achievement test scores, teacher recommendations and previous subject grades. A part-time counselor is often associated with a team, and the teachers usually have periods for joint planning scheduled during the week.

Some intermediate schools use a combination of departmental organization in grades 8 and/or 9 and interdisciplinary clusters in grades 6 and 7. Another pattern is the self-contained classroom which some schools use in grades 5 and 6 and it is occasionally used with 7th and 8th grades. Self-contained classrooms are sometimes used for remedial students, but a survey of principals indicated that there were many problems associated with classes of that type.

Instructional activities are usually scheduled in blocks, on an individualized basis, mini-courses, small group activities or a combination of these patterns. Individualized scheduling is often done by computer, and block schedules for interdisciplinary teams are usually determined by the school administration. Within the blocks, the team of teachers develop the individual and class schedules. Lunch and physical education usually fall outside the team blocks.

B. Curriculum

The standard academic subjects taught at the intermediate level are English or language arts, mathematics, science and social studies; instruction in physical education fulfills the sixty clock hours required by state law. Art, music, industrial arts and home economics are complementary to the basic courses and are offered in most schools but for fewer periods during the week; for example, band or chorus programs are scheduled during activity periods, after school or on a rotating basis.

The Study Committee sought examples of curricular programs which school districts have developed to meet the developmental needs of early adolescents. While the Committee was aware of many interesting models developed by districts throughout the nation, this report will cite examples of Massachusetts school practices. We suggest that the list is not all-inclusive because there was insufficient time for an exhaustive survey. Many local school districts have developed imaginative programs and activities which might be replicated or adapted, so these examples are a sampling.

The New Humanities: This is an interdisciplinary program for seventh graders in two schools; it incorporated material from the humanities, social studies, literature, music and visual art. The focus is on projects so that subject fields are unified around the concept upon which the unit is based. Some of the units which have been studied are: Communication, Prejudice, Individual In Society, Symbolism, Ecology, The Unknown, Competition, Authority.

Arts in Education: The Arts program at one middle school uses a graphic arts project to integrate artistic skills and career development, incorporates print making, graphic art design, layout, lettering to make greeting cards; production, marketing and sales of the cards will be the last phase of the project.

Another school uses art based activities for sixth graders to improve basic reading, writing and math skills.

Several local school districts co-sponsor "Days in the Arts" Program to provide multi-cultural music, visual arts, dance and drama activities for small groups during the school year and a week in the Berkshires during the summer.

The Children's Museum co-sponsors a program for eighth graders to participate in an innovative history program stressing multi-cultural contributions to the development of U.S. society. The students use local museums, historical sites, neighborhood excursions to study architectural and demographic history concentrating on the turn of the century.

Eight grade home economics students study child development at the Kindergym and the Children's Museum. Sixth and seventh graders study Boston neighborhoods learning map skills, keeping journals, making illustrations.

The Museum of Fine Arts co-sponsors a program for 6th grade students who participate in an experience-based study of ancient Egyptian cultures through museum visits, lectures, learning Egyptian crafts and arts, research projects, reading, social studies and arts activities.

Two local school districts sponsor Project Four Worlds so that 5th graders study the art traditions of the Afro-, Asian-, Hispanic- and North American white cultures through clay, wood, textiles and printmaking activities.

7th and 8th graders in a magnet junior high concentrate on the basic skills with a multi-cultural emphasis through activities including arts, environment, energy, human ecology, urban studies, theatre arts, music, poetry.

Fifth grade students from two communities study language arts, multi-ethnic folk tales, history of slavery and immigration, folk songs and drama.

The science program for junior high students in a rural area has an environmental base dependent on the surrounding countryside. The standard science offerings stress essential concepts of environmental science and the curriculum has been adapted to local conditions, and the students use the discovery method.

Suburban sixth grade students participate in a four day residential program at a rural location. Environmental science is the focus of the experience which incorporates academic, discovery and athletic activities.

A junior high program focuses on an outdoor science program closely related to the science curriculum. The teachers have written a resource packet which covers a variety of topics, ethics to survival science, and gives meaning to the out-of-doors explorations.

Project Lite (Learning Integrated Through Esthetics) combines the basic skills with a multi-sensory approach to aesthetics. Students work with music, painting and movement and combine those areas with language arts, arithmetic, vocabulary, writing, research and self-concept. This Title IVC validated program has been found to be quite successful with non-verbal learners.

Project Exploration provides experiential learning in the natural world, the community and a greater understanding of human development. Classroom work is supplemented by canoeing, oral history, cultural journalism, city scavenger hunts, orienteering, outdoor cooking, and rock climbing. The validated project has shown that students learn about environments and processes beyond the traditional classroom.

Many intermediate schools offer some foreign language programs, principally French and Spanish in grades 7,8 and 9; a few schools offer sixth graders a foreign language. However, most of the programs are really an introduction to the language and culture so that the emphasis on language proficiency is left to the high schools.

Though the greatest emphasis is on heterogeneous groupings of students, there is a concern on the part of intermediate school educators to meet the needs of gifted students, and about 22% of the districts surveyed have programs. A survey of principals indicated that there is considerable variation in the types of programs offered and as to the definition of program for the gifted; in some cases algebra in grade 8 was listed as a program for the gifted. The following short descriptions are a sample of special programs for gifted early adolescents.

The schools in one district are given technical assistance by a college to develop special social studies, English, mathematics, reading and science programs to fit the specific needs of the students in each school. A student magazine represents the educational experiences of the group, and workshops are given for parents and teachers of the children.

Another city schedules a homogeneous group of seventh and eighth graders for academic instruction in large and small groups, and independent study. Periodically students determine their own academic activities and the structure of the day under the supervision of a team of teachers. The basic subjects are augmented with humanities, sociology, philosophy, psychology, anthropology and foreign languages, and the program is designed to expand the student's educational experiences rather than accelerating, him/her.

Project PRISM (Potential Realized through Innovative Support Models) identifies gifted and talented sixth graders, assesses their aptitude, achievements or creativity and provides differentiated learning experiences within the context of their regular classroom. Project staff provide in-service training and consultation for seventh and eighth grade teachers.

Project IMPACT took fifth and sixth grade students out of their regular classrooms for two half day sessions a week. They defined an area of interest, studied it and then did in-depth investigations of real problems.

C. Special Services and Programs

Most schools have one or more counselors who work with students on an individual basis though there are group guidance programs in some schools. There is considerable variation in the ratio of guidance counselors to students. Counseling services include individual and group testing, contact with parents, career education, school adjustment and selection of courses for high school.

The early adolescent years are ones in which counseling services are very important, and the programs described below are examples of approaches taken by school districts to meet the needs of students at this critical stage. Many successful programs are oriented toward the future and direct the student to information about career possibilities.

A career education program in one community is designed to familiarize students with the values of the world of work, to gain an understanding of the skills involved in specific occupations, gaining a better understanding of the economic system. In addition, the program brings school and community together in an unusual manner through a process of classroom visits by community people, field trips to businesses and the shadowing of a working person by a student.

Eighth grade students in a regional district are provided occupational guidance by a full time aid who keeps a file of employers and job listings in the area.

Project Upstart is for seventh grade students who are recommended for the program so that they can participate in the eighth and ninth grades. They identify their own interests, listen to guest speakers, discuss careers and take field trips to work sites. Ninth graders have an opportunity to take a salaried position in a community placement of their choice.

One school schedules weekly group guidance sessions for seventh and eighth grade students. In the first year, the emphasis is on self-awareness with a secondary focus on career information. The second year focuses on individual career interests, and students develop a folder based on information gained through research or interviews on a specific occupation. In addition, there are periodic career days supplemented with evening parent meetings and individual guidance sessions.

Project MORE (More Orientation Regarding Employment) incorporates a career information and guidance center, mini-courses, career days, group and individual guidance programs, cooperative work/study activities for junior high students. Community resource people help the students become familiar with some of the career options, and in-service educational programs are provided by the district for the teachers.

Students at one junior high school plan and run a career day. They prepare for the event by interviewing local people in different occupations and select participants who represent areas of student interests. The program is related to the language arts curriculum.

Seventh graders from five towns participate in a six week summer program exploring the vocational shops. They will receive career counseling while having a "hands-on" experience in traditional and non-traditional shop/career opportunities.

The CAREERS program is designed to provide a heterogeneous group of junior high students with decision-making and career-awareness skills. Guidance and counseling programs focus on vocational options available in the high school and vocational technical high school as well as information on career options.

MICROS gives junior high students an introduction to careers in high technology. The students work with micro computers over a ten week period and are given counseling about future training opportunities in either the high school or vocational technical high school.

In addition to career or vocational programs, early adolescents need opportunities to help prepare for their futures by understanding themselves and their world better. This can be done in a variety of ways, five program examples are listed below.

One middle school has a voluntary student group counseling program organized by a guidance counselor. The sessions are scheduled during study periods with topics chosen by the students. Topics include: how to get along with parents, how to get along with friends, drug information, dating, alcohol and divorce.

The Effective Parenting Program focuses on helping the participants develop skills in decision making, home management and parenting in an effort to strengthen family structures. The students are helped become better family members and have an opportunity to work with infants while learning about child development and behavior.

Project H.E.L.P. is designed to expand the knowledge and skills of junior high students in understanding and caring for children. The program also includes consumer education.

A suburban junior high has a voluntary small group counseling program for students who are upset because of separations or divorce. The group session is usually scheduled during study period. The focus is on the whole family experience rather than on the student.

Another program for seventh and eighth grade students provides a series of exploratory experiences designed to help them select careers, plan leisure time hobbies and learn "survival skills" for daily living. The curriculum centers around clothing repair, child care and babysitting, grooming, foods and nutrition, wood and plastic, technical drawing and metal, equipment maintenance and offset lithography.

In Massachusetts, Special Needs programs are mandated by state law (Chapter 766). The degree of implementation varies, depending upon the extent to which a school district interprets the law to mean minimum coverage or maximum benefit to the students. Services usually offered include facilities for the mentally retarded and learning disabled students. Other programs offered are dependent upon individual needs as compliance to the law requires. The degree of implementation affects the effectiveness of individual educational plans and the impact upon the local school staff. Some promising local school district practices are described below.

The Alternative Junior High is designed for students who have been evaluated and found to have special needs. They are assigned to smaller classes with more personalized style and concentrated adjustment counseling.

Another program is the "Project Mainstream", designed to give the teaching staff additional skills for their work with students with special needs. Teacher Consultants work with the teachers to help them develop more flexible teaching styles, modify their curriculum and develop greater understanding of special needs students and ways to integrate them into regular educational programs.

One town developed a Student Profile Information Program on a mini-computer system to provide teachers with information on the teaching and behavioral strategies which have been successful with special needs students. A Tip Sheet Checklist on each student was filled out by teachers, parents and the students; the positive data describes the student's learning style together with strategies, for example, "Student responds to untimed math test". The system allows teachers to receive information from an objective source and modify the student's educational program early in the school year.

- One community placed fifth and sixth grade students in heterogeneous teams and classes so that special needs students are in all of the groups. A Mainstreaming Facilitator works with all of the children who need extra help with material; the special needs students are not singled out for special assistance, and the Facilitator also works with students who are above average. The Facilitator, however, has responsibility for the testing of special needs

students, quarterly and annual reviews and re-evaluations of the students, maintaining records and coordinating program between grade levels. In-service programs prepare the regular teachers to work effectively in teams and with heterogeneous groups of children. The program is being extended to the junior high school level.

Another program had students with learning disabilities make a film using Polavision; the film, "Welcome to the Resource Room" enhanced the speaking skills of the students in addition to their ability to work as a team. The movie featured activities in the class and was such a successful project that the class followed this with an animated film, "The Duck From Planet X".

D. Staffing

Teachers presently teaching in the intermediate schools have come out of either secondary certification or elementary certification programs; very few teachers have specialized training in intermediate education in Massachusetts or elsewhere in the country. However, the new Massachusetts certification requirements include middle school certification, teachers already teaching are exempt from the requirements. Therefore, in-service education programs for intermediate teachers are very important so that they gain increased understanding of the developmental needs and character of the students and ways to present curriculum which relates to the early adolescent.

One urban district set up a Middle School Task Force to concentrate on improving education in the intermediate schools. Each school selected a leadership team to participate in a summer institute, develop a plan for the school and provide the leadership for implementation of the plan. In addition, a selected group of teachers was chosen to participate in a program at the Thompson Island Education Center to develop a new outdoor science curriculum; classes then use the curriculum and make field trips to the Center. Another group of teachers was selected to participate in an Institute at the John F. Kennedy Library to develop a curriculum in citizenship education. The resources of the Library, the University of Massachusetts/Boston and the city are being used to teach about government and politics in creative meaningful ways.

Pupil-teacher ratios vary widely from district to district, ranging from a favorable 10 to one to a high of 23 to one. The number of students per classroom varies from twenty to more than thirty-five with an average of 26.5.

Many intermediate schools report that they have department heads in some subject areas, and some schools report having department heads only at the junior high level. A number of schools report that they have department heads who teach at the high school level. This procedure may account for some junior high schools looking like miniature high schools.

Many teachers and administrators are concerned about the policies for evaluating and promoting early adolescents. Many schools reported that they retain some students each year though the number retained is under 2%. The criteria for retention is usually based on a number of courses failed (two or three subjects). There may be a discrepancy between the social maturity of some of these students and the requirements of the school since some schools use a defined standard for their grading system.

This section of the Report has attempted to highlight some of the practices and problems in intermediate schools. The examples cited are exemplary and are not inclusive of the programs in school districts in the state. However, these examples are not enough since more attention must be turned to addressing the needs and demands, unarticulated for the most part, of this age group.

SECTION IV

REVIEW OF CURRENT RESEARCH ON THE EARLY ADOLESCENT LEARNER

PREPARED BY: DR. HARRY SCHUMER

Introduction

Early adolescence as defined by this report is that period between 10 - 15 years of age. It is during these years that puberty transforms the child into a young adult, achievement of the biological capacity to reproduce has profound repercussions on all other aspects of the youth's development—intellectual, moral, social and emotional. In fact, these vast and dramatic physical changes often mask equally dramatic changes taking place in mental and psychosocial development.

Although it is clear from the literature that this period is not an arbitrary one, it is probably one of the least understood and least studied in the entire span of human life. Joan Lipsitz reviewed the existing research on this age group and concluded that there is a void in the research literature on children aged 10 - 15. In her book, aptly called "Growing Up Forgotten" (Lipsitz, 1977), she clearly documented the special vulnerability of this age group and the epidemic proportions of such social problems as teenage pregnancy, venereal disease, drug and alcohol addiction, runaways. Other scholars in the field also point out the paucity of early adolescent research (Hill, 1973; Elkind, 1975). One possible reason for this lack of research and general neglect of this age group is that the period of early adolescence does not coincide with any single stage in most developmental theories, i.e. Freud, Erikson, Piaget. In an intriguing article entitled "A Conception of Early Adolescence", Kagan (1971) points out that the consideration of early adolescence as a developmental stage is not only consistent with Western psychology but more importantly offers a valuable way of establishing the relationship between biological development and psychosocial development. Kagan states:

"The essence of the argument is that the twelve-year old has acquired a new cognitive competence—the disposition to examine the logic and consistency of his existing beliefs. The emergence of this competence which may be dependent on biological changes in the central nervous system, is catalyzed by experiences that confront the adolescent with phenomena and attitudes that are not easily interpreted within his existing ideology. These intrusions nudge the preadolescent to begin an analytic reexamination of his knowledge."

Other scholars state that a major factor contributing to the neglect of the 10 - 15 age group is the lack of a convenient label. The years immediately preceding puberty are referred to as "late childhood" or "preadolescence". The years immediately following puberty are referred to as early adolescence. Eichhorn (1966) has coined the word "transescence" defined as "the stage of development which begins prior to the onset of puberty and extends through the early years of adolescence". While the concept of transescence has proved especially useful to educators in the junior/middle school movement, the term has not found widespread acceptance hence the use of the more traditional terminology of early adolescence, pubescence, preadolescence in this report.

Historical Perspective

Although early adolescence is a distinct period, it is not an isolated period and must be considered within the broader context of adolescence which most often is culturally determined and defined. Adolescence as we know it today was nonexistent before the industrial revolution. As Coleman (1974) points out, the household was the "general purpose unit at that time". Children worked along side their parents or other adults on tasks relevant to their general level of

development. At the end of pubescence or upon attainment of reproductive maturity, children went through a ritual—a puberty rite and gained many of the rights and privileges of adulthood. The industrial revolution caused the decline of the household as a general purpose unit. Young people had to go outside the home to work, primarily in the factories, but the workshops did not provide a home for the child nor assume responsibility for their upbringing. Rather, factories discharged their responsibility to the child through money wages. It was in this vacuum that mass schooling slowly came into being. Society at large began to assume some of the responsibilities for bringing children to adulthood. Mass compulsory education has had the far reaching positive effect of providing the young with opportunities for mobility and improvement of the conditions of life. It has also had the profound negative effect of prolonging adolescence (long after reproductive maturity is obtained) and of segregating young people from the mainstream of society so that most of their interactions are with their peers. In a sense, adolescence in western, technological society can be defined as a “holding period in which education, maturation and working to assume an adult role are the major tasks to be faced” (Adams, 1980).

Context of Early Adolescence

Along with the major shift from the household as the general purpose unit to the society at large, there have been other changes in contemporary America which should be considered in order to understand the cultural context of the early adolescent.

The shift in traditional family patterns and maternal employment is one of the changes which has occurred within the past twenty years. Not only is there increasing participation of women in the work force but growing numbers of women with children under 16 are in work force (in 1950 - 14%, in 1975 - 39%). Hill (1973) and others feel that the negative effects of maternal employment have been exaggerated and research has indicated no differences in the social behavior of children with working mothers. However, this research has not focused on the early adolescent period so, therefore, the effect on early adolescent development is unclear.

In addition to changing family patterns, there has been rapid change in both attitudes and behaviors of contemporary youth in terms of sexuality, marriage and lifestyles. These changes have resulted in greater choices for the adolescent and underscore the importance of providing opportunities for young people to explore and develop decision making skills. The rapid changes in societal customs tend to erode the relevance of parental information. A crucial question which merits careful consideration in the 1980's is whether to maintain parents as sources of information and authority or to supplement some traditional parental functions through other institutions, schools or community agencies.

There are also dramatic changes in work opportunities for youth. Legal barriers, increasing skill requirements as well as other factors, have diminished opportunities for full-time employment for youth during the past century. Underemployment and unemployment of youth, especially among minorities will persist as serious problems (Coleman, 1974). While affecting older youth more directly, this reality causes stress and anxiety on young adolescents who anticipate entering the labor market.

Another factor in the contemporary America context of the early adolescent is the notion of cultural pluralism. The different needs and concerns of diverse racial/ethnic, religious, regional, urban/suburban/rural, and socio-economic groups reflect distinct views as to what constitutes the good life. (Konopka, 1973).

Physical and Biological Changes During Early Adolescence

Although it is important to consider the cultural context in which the early adolescent develops, the common denominator of this age is the dramatic physical and biological change occurring at

this time. The changes in the size and shape of the human body and in the underlying chemical and physiological processes occur continuously throughout life but are most evident during the first three years of life and during puberty. It is during the period of sexual maturation that differences between males and females are most apparent. The most visible indicators of pubertal change are the rapid increase in body size, and a change in shape and body composition often referred to as the adolescent growth spurt. Other indicators include the emergence of secondary sex characteristics such as auxiliary and pubic hair, voice changes, development and enlargement of the genitals, etc. which often occur at different times. Some of these changes are common to both sexes, but most are sex specific and a result of the increased production of sex hormones. Males have an increase in muscle size and strength and decrease in fat. While females also increase in muscle size and decrease in fat, the change is not as great as in males. In fact, researchers point out that a certain percentage of fat seems necessary for females to achieve menarche (Frisch, 1974). Although these hormonal differences between the sexes probably have different behavioral consequences, it is important to point out that the physiological differences interact with cultural expectations of male and female in a given society. It is probably fair to state that in most societies, males are more highly valued and have more freedom of movement than females. While the sex roles are changing in the United States as well as other countries, the double standard is still pervasive and must be considered when determining the curriculum and instruction of the middle/junior high school. (For a more detailed review of the literature and issues involved in biological development and its interaction with societal expectations as well as sex role differences see Peterson and Taylor (1980) and Huston-Stein and Welch (1980).

Tanner (1962, 1971) notes the great variability in the physical and physiological status of early adolescent children of the same chronological age. Tanner depicts three 14.75 year old boys and three 12.75 year old girls. All are entirely normal and healthy yet one boy can be easily mistaken for a 12 year old boy and another for an 18 year old. The same is true for the females, one looks like a 10 year old girl and the other like a woman of 20. Males lag roughly two years behind females in physical development, thus the average 12 year old girl is often taller and heavier than the average 12 year old boy. These differences in physical and sexual maturation for both males and females again interact with cultural expectations of being male and female. The literature points out that the early maturing male has a definite advantage over late maturing male—being taller and stronger and, therefore, more able to participate in highly valued athletics. The late maturers are likely to have a negative self concept, feelings of inadequacy and fears of being rejected. For the females the differences are not as pronounced (Jones and Bailey, 1950; Weatherly, 1964).

One of the interesting and well documented findings of researchers is that the age of menarche in industrial societies has decreased over the last 100 years on the average of about 4 months every 10 years. Although this trend is now leveling off scientists have puzzled over this fact; many attribute it to better nutrition and health care (Tanner, 1968).

Cognition and Learning in Early Adolescence

Most educators would agree that one of the major goals of education is to develop intelligent behavior or the ability to think abstractly. This ability is far reaching and probably affects all we do, say or think. Significant accumulated research indicates individual abilities are different at distinct points in the life cycle. A few of the cognitive abilities, which develop over the course of childhood and adolescence are: the ability to represent, or model, sensory impressions in a coherent picture of the world; the ability to classify objects and form concepts; the ability to memorize; abilities involved in solving problems, and reasoning abilities. There are two major approaches that attempt to define cognitive changes over time—the Continuity-psychometric approach and the Discontinuity-developmental approach.

The adherents of the Continuity-psychometric approach believe that changes in intellectual performance are part of the continuous process of cognitive growth, a process which in large part is

the result of learning. Sudden shifts or discontinuities are attributed to environmental influences. They also believe that human behavior is characterized by its measurability—it exists and, therefore, can be measured. Robert Glaser (1971) and Robert Gagne (1977) are leading representatives of this approach and emphasize skills and their development. Their major focus is on individual and group differences on a specific measure.

In contrast, the Discontinuity-developmental approach is exemplified by the work of Jean Piaget (1950); he acknowledges the importance of the environment but also places a great deal of emphasis on the role of maturation in intellectual development. In this view, intellectual development is discontinuous and progresses in stages and the events which characterize each stage occur in a predictable order. However, the timing of each stage varies from individual to individual and from culture to culture because of genetic and environmental influences.

This report will focus on the developmental approach represented by Piaget and his associates. By the onset of early adolescence, virtually all children have attained what Piaget terms, the concrete operational stage.

At this stage, the child is able to think of actions and events in a series and understands that a chain of actions may proceed or in many cases be reversed. This capability allows the child to understand the principle of conservation, that altering the shape of a piece of clay does not affect its quantity. The operational child understands the principles of seriation, that 7 is more than 4 and 2 is less than 5, and can classify objects and events into hierarchical categories. While symbolic manipulation is greatly increased, thought tends to remain concrete; symbols represent tangible objects and events.

The next developmental stage is the formal operations level, Piaget's final stage. In an advanced society, this stage may be reached between the ages of 11-15 (Niemark, 1975). Formal operations represents the capacity to manipulate hypotheses in the absence of concrete referents. Piaget aptly refers to this period as "Thought taking wings" when the ability emerges to systematically consider alternatives to a given reality and when individuals are able to critically reflect upon their own thinking.

Although there is considerable debate on the proportion of individuals who reach or are ever able to reach this stage (Elkind, 1975), there is substantial evidence that attainment of the formal operational level is not universal, even past the age of early adolescence. This means that curriculum and instruction at this level should not assume that the early adolescent is capable of abstract reasoning and formal operations.

Psychosocial Development in Early Adolescence

As our previous discussions infer, early adolescence is commonly acknowledged to be a period of great importance in psychosocial development. Kagan (1971) identifies a variety of "pre-occupying motives" for many early adolescents including sexual inadequacy, interpersonal power, autonomy of beliefs and action and acceptability to peers. He believes that resolving these issues is of utmost importance to the early adolescent and dominates weaker motives to be competent in school. As a result, psychosocial development as well as cognitive factors must be considered in any complete treatment of early adolescent education.

Erik Erikson is probably the dominant theorist in the field of psychosocial development. Erikson describes eight stages in the socialization process. Each stage involves a "psychosocial crisis" which must be resolved before the next stage can be attained. Central to his theory is identity formation which generally occurs during adolescence. To Erikson, adolescence occupies a pivotal position. It is the period that simultaneously recapitulates all the earlier stages and anticipates all those to come (Erikson 1968). During early adolescence, we consciously explore our uniqueness

as individuals and our relatedness to other human beings. We seek continuity of experience in two ways: continuity between the experience of ourselves from one moment to the next, and between the way we perceive ourselves and others perceive us. thus, we achieve a sense of identity. Erikson states that the resolution of identity requires many processes including reflective thought, role taking and may require formal operations. Although these processes appear in part during early adolescence, there are few studies at the middle/junior high school level on identity formation or perception of self and others (Hill and Palmquist, 1978).

In a similar vein, other scholars view early adolescence as a period marked by significant changes in the way impressions are formed of self and others. An important area of research in self-concept formation concerns the adolescent's increasing ability to engage in "recursive thought", i.e. to think about others' thoughts, especially others' thoughts about abstractions. A study by Barenboim (1978) found that there was a major shift between 12 and 16 years, from the virtually exclusive production of concrete references to the conjoint production of concrete and recursive inferences in 14 and 16 year olds. It appears that early adolescence is a period when individuals begin to produce and use highly differentiated, abstract inferences and constructs when describing the self and others.

Along the same line, Elkind (1967) used a Piagetian perspective and stated that a characteristic of the early adolescent is egocentrism, a belief that others are as preoccupied with their appearance and behavior as themselves. This belief accompanies the onset of formal operations and stems from adolescent's inability to differentiate personal concerns from those of others, and resulting results in overconcern and conflict. The overconcern with others' opinions results from the mental construction of an "imaginary audience"—believed to be either critical or admiring of the adolescent. At the same time and probably as a result of playing to an "imaginary audience", they have a tendency to be overconcerned with their own feelings and display a tendency to construct a "personal fable" of uniqueness. This egocentrism is overcome by the gradual differentiation between their own preoccupation with other people's thoughts and integration of other people's feelings with their own reducing their sense of uniqueness. Lipsitz (1980) contends that egocentrism is so characteristic of early adolescence that it may frustrate prevention programs (i.e. teenage pregnancy). Prevention programs are based on one's ability to say "I am not unique. It can happen to me." Adolescents can break out of this egocentrism as they are able to differentiate adequately between self preoccupations and those of others and while integrating their sense of reality with that of others.

The cognitive shift to formal operational thought also makes possible the conscious examination of values. Rather than seeing the development of a sense of morality solely as a process of internalizing external rules, Kohlberg (1963) and others maintain that internal moral standards are the result of transformations dependent upon cognitive growth as well as social experience.

The capacity to sustain emotionally supportive relationships develops during adolescence. While scholars differ on when adolescents move from more superficial, transient friendships to more stable, emotionally rewarding relationships, they do agree that during early adolescence the peer group becomes increasingly significant. Bronfenbrenner (1972) cites research that suggests that dependency on peers rather than parents is greatest where one or both parents is frequently absent. Peck and Havighurst (1960) did a longitudinal study of children from 10 to 17 and found that when judging or rewarding peers, the adolescents took into account not only surface values (clothes, athletic ability) but also moral values. As students got older, they rated character values more heavily in relation to surface values. Gordon (1972) stated that acceptance vs. achievement is the major dilemma faced by the early adolescent. For example, one's popularity with peers may be reduced by making high grades in school while achievement in sports or extra curricular activities may lead to increased popularity. Of course, this depends upon the particular peer subculture and their values. Although the evidence supports the importance of peer group influences during early

adolescence, there are several studies which point to the importance of parental values as the principal determinant of educational aspirations and occupational plans of the adolescent (Campbell, 1969; Kandel and Lesser, 1969). On the other hand, the process of integrating concepts of intimacy and sexuality is more subject to peer group influence than parental influence (Hartup, 1977).

A major challenge for the schools should be channeling the attitudes and values of the early adolescent peer subculture in healthy and productive ways. Perhaps the introduction of more adult-led youth clubs and organizations as well as youth initiated activities within the context of schools and the community should be explored.

Variability and Early Adolescence

It is probably fair to state that most schools group children according to chronological age. If you are 13, it probably means that you are in the eighth grade and are studying a curriculum deemed appropriate for eighth graders. If we are told that someone is thirteen we are told almost nothing about that person from a developmental point of view (except, of course, probable grade placement). We know from our previous discussions that the extreme variability among individuals at this age period is not only evident on physical dimension, but also socially, emotionally intellectually. Therefore, the assumption of homogeneity (they're all alike) may be the most misleading basis for school organization that we have adopted. In addition to the differences between individuals (inter-individual variability) there are also changes within same individual (intra-individual variability). In other words, it is a period of great change for each individual. Although we pay lip service to variable growth, we often set policies and programs based upon homogeneity. As Lipsitz (1977) appropriately points out the myth of homogeneity serves as a powerful barrier to promoting the healthy development of individual young adolescents.

Lipsitz (1977) and others (Eichorn, 1980; Coleman, 1971) point out the importance for early adolescents to have more contact with younger children and older adolescents as well as more contact and involvement with adults in the community. Beane (1979) suggests that there be "multi-age" learning in the schools. For example, the early adolescent might be a tutor to a younger child or the tutee of an older adolescent. The early adolescent might assist adults in supervising children's social and recreational groups or might help older adolescents with some community service project. According to Beane, the early adolescent should be helped to develop a view of self in the larger life span. Adults in the community might have a consistent role in the school so that the early adolescent could go out into the community on a supervised internship or practicum and experience more meaningful contacts with other adults.

The importance of early adolescence as a time for critical intervention is suggested by several studies. Bachman (1972) examined the causes for dropping out of high school and found that the personality patterns typically contributing to failure in school were established during the early adolescent period. Toepfer and Marani (1980) examined children who were all academically successful in elementary school but developed achievement problems in junior high which continued throughout high school. The findings of these studies suggest not only that intervention is crucial at early adolescence but that individualized instruction and more attention to psychosocial needs is in order.

Formal Education for Early Adolescents

The junior high school has been the most typical kind of school serving the early adolescent. The junior high school came into existence in the early 1900's not just because of the special needs of this age group but more importantly to reduce crowding in elementary school buildings and to

keep dropout prone pupils until the end of the ninth grade rather than eighth (Hurd, 1970). The junior high curriculum was essentially a “watered down” version of the departmentalized curriculum of the senior high school. Teacher training and teaching certification programs for junior high and high school teachers were and still are generally, the same. By the mid-nineteen sixties, the middle school movement emerged. It was a response not only to the trend toward earlier onset of puberty but more importantly the failure many educators felt of junior high schools to address the special needs of youth undergoing the physical, social, emotional and cognitive changes of early adolescence (Fielder, 1978; Eichorn, 1977, 1980).

The literature on middle schools, reflects the philosophy of educational practitioners as to the ideal characteristic of schooling which should be provided in early adolescence. Certainly, the schooling of early adolescence must reflect this uniqueness.

The Educational Research Service (1975) prepared a list of the features of an ideal middle school:

- emphasis on guidance and human relations
- emphasis on affective education as well as subject matter
- less emphasis on competitive interscholastic athletics
- less emphasis on sophisticated socializing such as night dances and dating
- exploratory courses and activities to help students develop their own interests
- interdisciplinary teaching teams
- each student has one “home-based” teacher who gets to know that student really well
- diversity in teacher certification (including teachers trained at the elementary level, who may be more child-centered, and teachers trained at the secondary level, who may be more subject-oriented)
- flexible scheduling
- gradual transition from self-contained classroom to departmentalization.

The research on middle schools indicate that the ideal is by no means the norm. Middle schools are often established out of purely practical concerns, e.g. crowding of elementary schools, or promoting racial integration (Alexander, 1969). The research studies on the effectiveness of middle school education support neither the claims of the middle school advocates nor of their critics (Doob, 1975). The results are unclear and in general point to little differences between middle schools and traditional schools in student achievement, instruction practice, curriculum, staffing and facilities. Perhaps a more useful research approach would be to compare specific instructional strategies, curriculum innovations, etc. on outcomes of specific types of students regardless of the type of school in which it is implemented.

Conclusion

This review of early adolescent development, while not intended to be comprehensive has focused upon that body of research which has relevance for the education of the early adolescent. The dramatic physical, cognitive and the resultant psychosocial changes all merge to create a unique period of human development. Moreover, these changes are occurring in a changing cultural and initiated activities within the context of schools and the community should be explored.

SECTION V

AN INSTRUMENT FOR LOCAL ASSESSMENT OF EARLY ADOLESCENT EDUCATION

The Study Committee recognizes and values local school district autonomy and control so the Committee's Recommendations represent guidelines and suggestions rather than mandates or requirements. This section has been organized in a way that will allow parents, students, teachers, administrators, elected officials, and the public to use the Recommendations as a first step in the process of examining their own schools for early adolescents. The school or program can be compared to the Committee's Recommendations which are based on the findings, research on the developmental characteristics of the age group and the practical experience of the Committee members in their work with early adolescents. The examination or review of the educational program can provide a school district with insights and tools for improving the education provided for children between ten and fifteen years of age.

This section is intended to help a school district examine and assess its middle grade curriculum, teaching methods, organization and resources. It can also provide a basis for determining the areas which are consistent with the Recommendations and which areas might be strengthened.

An appropriate curriculum for early adolescents will:

- _____ include a wide variety of exploratory courses and activities, but will provide for indepth learning experiences as well
- _____ place heavy emphasis on mastering the basic skills (reading, math, writing)
- _____ be suitable for the developmental level of each student, according to research findings and observation of that student
- _____ include a wide variety of teaching materials and teaching methods
- _____ utilize interdisciplinary curriculum units to demonstrate the relationship between academic subject disciplines
- _____ offer opportunities for "hands on" learning so that students experience concepts and ideas in a variety of ways
- _____ provide opportunities for learning experiences in the community and relationships with adults in and out of the school setting
- _____ include parents and community people in curriculum development
- _____ include career awareness activities so that the students can learn about traditional and non-traditional careers
- _____ integrate health education into the curriculum so that students are helped to understand issues such as adolescent physical, sexual and emotional development, family relations, nutrition, alcohol and drug usage and abuse
- _____ recognize that early adolescents need ample opportunities to expend physical energy so the school program should incorporate this need into the daily program

- _____ recognize the changing characteristics of the age group and the special needs of students with physical problems
- _____ provide enrichment and remedial programs as needed
- _____ reflect cultural pluralism by incorporating material from different racial, ethnic and socio-economic groups
- _____ teach and encourage students to work cooperatively with other students
- _____ teach and encourage students to study independently
- _____ teach decision-making skills and encourage students to use those skills
- _____ emphasize “how to learn” rather than “what to learn”

A SCHOOL FOR EARLY ADOLESCENTS WILL BE ORGANIZED SO THAT:

- _____ scheduling, policies, student and/or staff assignments do not cause undue stress
- _____ the good mental health of the students and staff is a consideration in planning and programming
- _____ the students are in the same school for at least three years so that they and the teachers will be able to develop relationships and a sense of continuity
- _____ ninth grade students should be placed in the high school
- _____ interdisciplinary teaching teams work with students and provide individualized and personalized instruction
- _____ student class schedules are flexible
- _____ the teaching team should group the students
- _____ grouping of students should be flexible
- _____ horizontal or vertical grouping of students is done on a short term basis and never for an extended period of time
- _____ teacher/pupil ratios should be lower than elementary or high school and class sizes should be flexible
- _____ strong guidance programs with qualified counselors will be available in sufficient numbers to serve the students enrolled
- _____ a teacher advisor program is set up to assist the students
- _____ student governance and discipline procedures are developed with the involvement of students, teachers, parents, and administrators
- _____ students are helped to learn problem solving and decision making
- _____ student enthusiasm is a positive force in the school

TEACHERS OF EARLY ADOLESCENTS WILL:

- _____ be prepared through pre-service and in-service programs to understand the specific needs and characteristics of the age group
- _____ be prepared to individualize instruction for early adolescents
- _____ receive either pre-service or in-depth in-service education on the intellectual, social, emotional, and physical characteristics of the students
- _____ be prepared and able to assist students to develop reading and writing skills
- _____ understand the influence of the peer group and be able to utilize it for positive human relations and positive learning
- _____ be able to help parents understand the influence of the peer group and in the ways in which the family influences the young adolescent
- _____ be prepared to understand and work with diverse student populations (students with special needs, bilingual and minority)

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